

AMENDMENT TO THE SPECIFICATION

Please amend the paragraph beginning at line 3 on page 4 as follows:

FIG. 4 is a block diagram of a ~~mobile~~ remote station receiver and transmitter for common packet channel;

Please amend the paragraph beginning at line 20 on page 8 and ending at line 7 on page 9 as follows:

In the illustrative embodiment shown in FIG. 4, a ~~MS RS~~ spread-spectrum transmitter and a MS spread-spectrum receiver are shown. The ~~MS MS~~ spread-spectrum transmitter and the ~~MS RS~~ spread-spectrum receiver are located at the mobile station 35, shown in FIG. 1. The ~~MS RS~~ spread-spectrum receiver includes an antenna 409 coupled to a circulator 410, a receiver radio frequency (RF) section 411, a local oscillator 413, a quadrature demodulator 412, and an analog-to-digital converter 414. The receiver RF section 411 is coupled between the circulator 410 and the quadrature demodulator 412. The quadrature demodulator is coupled to the local oscillator 413 and to the analog to digital converter 414. The output of the analog-to-digital converter 415 is coupled to a programmable-matched filter 415.

Please amend the paragraph beginning at line 15 on page 9 and ending at line 3 on page 10 as follows:

The ~~MS RS~~ spread-spectrum transmitter includes a forward-error-correction (FEC) encoder 422 coupled to an interleaver 423. A packet formatter 424 is coupled through a

multiplexer 451 to the interleaver 423 and to the controller 419. A preamble generator 452 and a pilot generator 453 for the preamble are coupled to the multiplexer 451. A variable gain device 425 is coupled between the packet formatter 424 and a product device 426. A spreading-sequence generator 427 is coupled to the product device 426. A digital-to-analog converter 428 is coupled between the product device 428 and quadrature modulator 429. The quadrature modulator 429 is coupled to the local oscillator 413 and a transmitter RF section 430. The transmitter RF section 430 is coupled to the circulator 410.

Please amend the paragraph beginning at line 8 on page 11 as follows:

In the ~~MS~~ RS transmitter, data are FEC encoded by FEC encoder 422, and interleaved by interleaver 423. The preamble generator 452 generates a preamble and the pilot generator 453 generates a pilot for the preamble. The multiplexer 451 multiplexes the data, preamble and pilot, and the packet formatter 424 formats the preamble, pilot and data into a common-packet channel packet. Further, the packet formatter formats data, signaling, acknowledgment signal, collision detection signal, pilot signal and TPC signal into a packet. The packet is outputted from packet formatter, and the packet level is amplified or attenuated by variable gain device 425. The packet is spread-spectrum processed by product device 426, with a spreading chip-sequence from spreading-sequence generator 427. The packet is converted to an analog signal by digital-to-analog converter 428, and in-phase and quadrature-phase components are generated by quadrature modulator 429 using a signal from local oscillator 413.

Please amend the paragraph beginning at line 1 on page 18 as follows:

The transmission of the preambles ~~seizes ceases~~ because either the preamble has been picked up, detected, by the base station, and the base station has responded to the remote station with a layer one acknowledgment L1 ACK which the remote station has also successfully received. Transmission of the preamble ~~seizes ceases~~ also if the remote station has transmitted the maximum allowed number of preambles M_p . Upon receiving this L1 ACK the remote station starts transmission of its data. Once the remote station has transmitted more than M_p preambles, it undergoes a forced random back off procedure. This procedure forces the remote station to delay its access burst transmission for a later time. The random back off procedure could be parameterized based on the priority status of the Remote station. The amount by which the power is increased from preamble to preamble is D_p which is either fixed for all cells at all times or it is repeatedly broadcast via the BCCH. Remote stations with different priorities status could use a power increase which depends on a priority status assigned to the remote station. The priority status could be either predetermined or assigned to the remote station after negotiation with the base station.

Please replace the last page of the application (Abstract) with the new abstract which is shown on the following page.